## IN THE CLAIMS:

Please amend the claims to read as set forth below in the Listing of Claims:

Claims 1-47 (Cancelled)

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Claim 48. (Currently amended) A method of producing an immune response in an animal comprising, administering to said animal, an effective amount of an antigenic composition, comprising an adjuvant and an isolated *Chlamydia* species high molecular weight (HMW) protein, said HMW protein encoded by a nucleic acid comprising nucleotide residues 466 to 3417 of SEQ ID NO.: 1, residues 82 to 3036 of SEQ ID NO.: 23 or residues 85 to 3039 of SEQ ID NO.: 24, wherein the *Chlamydia* species is *Chlamydia trachomatis*, *Chlamydia pecorum, or Chlamydia pneumoniae*.

Claim 49. (Currently Amended) The method of claim 48, wherein said HMW protein comprises an amino acid sequence of amino acid residues 29 to 1012 of SEQ ID NO.: 2, residues 29 to 1013 of SEQ ID NO.: 15 or residues 29 to 1013 of SEQ ID NO.: 16.

Claim 50. (Previously Added) The method of claim 48, wherein said HMW protein is obtained using plasmid pAH342 obtainable from *E.coli* BL21 (pAH342) assigned ATCC accession number 98538.

Claim 51. (Currently Amended) A method of producing an immune response in an animal, comprising administering to said animal, an effective amount of an antigenic composition, comprising a pharmaceutical carrier and an isolated recombinantly produced *Chlamydia* species HMW protein, said HMW protein encoded by a nucleic acid comprising a nucleotide sequence of SEQ ID NO.: 1, 23 or 24, wherein the *Chlamydia* species is *Chlamydia trachomatis*, *Chlamydia pecorum*, *Chlamydia psittaci* or *Chlamydia pneumoniae*.

Claim 52. (Currently Amended) A method of producing an immune response in an animal, comprising administering to said animal, an effective amount of an antigenic composition, comprising a pharmaceutical carrier and an isolated recombinantly produced *Chlamydia* species HMW protein, wherein said HMW protein comprises an amino acid sequence of SEQ ID NO.: 2, 15 or 16.

Claim 53. (Previously Added) A method of producing an immune response in an animal, comprising administering to said animal, an effective amount of an antigenic composition, comprising a pharmaceutical carrier and an isolated recombinantly produced *Chlamydia* species HMW protein, wherein said HMW protein is obtained using plasmid pJJ701 obtainable from *E.coli* AR58 (pJJ701) assigned ATCC accession number PTA-4123.

CONT

Claim 54. (Currently Amended) A method of producing an immune response in an animal, comprising administering to said animal, an effective amount of an antigenic composition, comprising a pharmaceutical carrier and an isolated recombinantly produced *Chlamydia* species *trachomatis*, *C. pecorum or C. pneumoniae* HMW protein, wherein said HMW protein is encoded by a nucleic acid having a nucleotide sequence which hybridizes under conditions comprising 50% formamide and 37°C or 0.15 M NaCl and 70°C to a nucleotide sequence complementary to the nucleotide sequence of SEQ ID NO.: 1, 23 or 24, or a sequence complementary thereto from residue 382 to residue 3417, and which HMW protein is recognized by an antibody that specifically binds to a peptide comprising an amino acid sequence of SEQ ID NO.: 2, 15 or 16.

Claim 55. (Previously Added) The method of claim 48-54, wherein said composition is formulated as a microparticle, a capsule, a liposome preparation or an emulsion.

Claim 56. (Previously Added) The method of Claim 51-54, wherein said animal is a mammal or a bird.

Claim 57. (Previously Added) The method of Claim 51-54, wherein said composition further comprises an adjuvant